

ABSTRACT OF THE DISCLOSURE

A first positioning step S1 positions and fixes a light focusing element and a polarization converting element. A beam introducing step S5 introduces beams to a beam splitting element, the light focusing element and the polarization converting element. An optical image detecting step S6 detects an optical image through the above elements. An illumination-area comparing step S9 compares an illumination area formed by the detected optical image with a designed illumination area. An optimal-state determining step S10 determines whether the position of the illumination area of the optical image is located in the optimal position with respect to the position of the designed illumination area or not on the basis of the comparison result. The position of the beam splitting element is adjusted in a beam splitting element position-adjusting step S11 when the position of the illumination area of the optical image is not located in the optimal position. A second positioning step S12 positions and fixes the beam splitting element to the light focusing element and the polarization converting element.